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This is a divisional of Serial No.09/151,412, filed on September 10, 1998, issued on June 4, 2002, as U.S. Patent No. 6,399,345, entitled SUBUNITS OF NADH DEHYDROGENASE, which is a divisional of U.S. Serial No. 08/785,065, filed on January 17, 1997, issued on September 29, 1998, as U.S. Patent No. 5, 814,451, entitled SUBUNITS OF NADH DEHYDROGENASE.

IN THE CLAIMS

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Please cancel claim 14 without prejudice or disclaimer.

Please amend claims 1, 3 and 6 as follows. For the Examiner's convenience,
all pending claims are listed below.

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1. (Three Time Amended) An isolated antibody which specifically binds to a polypeptide selected from the group consisting of:
a) a polypeptide comprising the amino acid sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, or SEQ ID NO:7, and
b) a polypeptide comprising a naturally-occurring amino acid sequence at least 90% identical to the full length of the sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, or SEQ ID NO:7, wherein said naturally-occurring amino acid sequence supports NADH dehydrogenase activity.

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2. (As Once Amended) A composition comprising the antibody of claim 1 in conjunction with a suitable pharmaceutical carrier.

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3. (Once Amended) A method of preparing a polyclonal antibody with the specificity of the antibody of claim 1 comprising:
a) immunizing an animal with the polypeptide of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, or SEQ ID NO:7, or an antigenically-effective fragment thereof under conditions to elicit an antibody response; and
b) screening for antibodies with the polypeptide thereby identifying a polyclonal antibody which binds specifically to the polypeptide of SEQ ID NO:1, SEQ ID

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NO:3, SEQ ID NO:5, or SEQ ID NO:7.

4. An antibody produced by a method of claim 3.

5. (As Once Amended) A composition comprising the antibody of claim 4 in conjunction with a suitable pharmaceutical carrier.

6. (Twice Amended) A method of making a monoclonal antibody with the specificity of the antibody of claim 1 comprising:

- a) using the polypeptide of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, or SEQ ID NO:7, or an antigenically-effective fragment thereof, to make antibody-producing hybridoma cells; and
- b) screening for antibodies with the polypeptide, thereby identifying a monoclonal antibody which binds specifically to the polypeptide of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, or SEQ ID NO:7.

7. A monoclonal antibody produced by a method of claim 6.

8. (As Once Amended) A composition comprising the antibody of claim 7 in conjunction with a suitable pharmaceutical carrier.

9. The antibody of claim 1, wherein the antibody is:

- (a) a chimeric antibody;
- (b) a single chain antibody;
- (c) a Fab fragment; or
- (d) a F(ab')₂ fragment.

10. The antibody of claim 1, wherein the antibody is produced by screening a Fab expression library.

11. The antibody of claim 1, wherein the antibody is produced by screening a

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recombinant immunoglobulin library.

12. A method for detecting polypeptide of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, or SEQ ID NO:7 in a sample comprising the steps of:

- a) combining the antibody of claim 1 with a sample under conditions to allow specific binding; and
- b) detecting specific binding, wherein specific binding indicates the presence of polypeptide of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, or SEQ ID NO:7 in the sample.

13. A method of using an antibody to purify polypeptide of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, or SEQ ID NO:7 from a sample, the method comprising:

- a) combining the antibody of claim 1 with a sample under conditions to allow specific binding; and
- b) separating the antibody from the protein, thereby obtaining purified polypeptide of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, or SEQ ID NO:7.